[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0119; Directorate Identifier 2011-SW-034-AD]

RIN 2120-AA64

Airworthiness Directives; Eurocopter France Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for Eurocopter France (Eurocopter) Model AS350 and AS355 helicopters, to require inspecting for a crack in the control lever attachment yokes, and if needed, replacing the tail rotor gearbox (TGB). This proposed AD is prompted by improper casting of TGB casing assemblies, which may lead to cracking. A crack in the control lever attachment yokes could cause a loss of tail rotor pitch control, and consequently, loss of control of the helicopter.

DATES: We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- <u>Federal eRulemaking Docket</u>: Go to <u>http://www.regulations.gov</u>. Follow the online instructions for sending your comments electronically.
 - Fax: 202-493-2251.

- <u>Mail</u>: Send comments to the U.S. Department of Transportation, Docket
 Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey
 Avenue SE, Washington, DC 20590-0001.
- <u>Hand Delivery</u>: Deliver to the "Mail" address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Examining the AD Docket:

You may examine the AD docket on the Internet at http://www.regulations.gov or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this proposed AD, contact American Eurocopter Corporation, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at http://www.eurocopter.com/techpub. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

FOR FURTHER INFORMATION CONTACT: Robert Grant, Aviation Safety Engineer, Safety Management Group, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone 817-222-5328; email robert.grant@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, we will consider all comments we receive on or before the closing date for comments. We will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. We may change this proposal in light of the comments we receive.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD No. 2011-0104, dated May 27, 2011, to correct an unsafe condition for the Eurocopter Model AS 350 and AS 355 helicopters. EASA advises that cracks were found on some TGB casing assemblies when a dye-penetrant inspection was performed after the machining of the control lever attachment yokes. The inspection followed the repair of the manufacturing

mold. EASA reports that cracks in the TGB casing assemblies, if not detected and corrected, could lead to a crack on the control lever attachment yokes, which could cause the loss of tail rotor pitch control and subsequent loss of control of the helicopter.

FAA's Determination

These helicopters have been approved by the aviation authority of France and are approved for operation in the United States. Pursuant to the applicable bilateral agreement with France, EASA, its technical representative has notified us of the unsafe condition described in its AD. We are proposing this AD because we evaluated all known relevant information and determined that an unsafe condition is likely to exist or develop on other products of these same type designs.

Related Service Information

Eurocopter issued Alert Service Bulletin (ASB) No. AS350-65.00.46 for Model AS350 helicopters and ASB AS355-65.00.22 for AS355 helicopters. Both ASBs are Revision 0 and dated May 18, 2011. The ASBs call for non-destructive inspections, such as a dye-penetrant inspection, to check for cracks in the attachment yokes of the TGB casing assemblies. If there is a crack, the ASBs call for replacing the TGB with an airworthy TGB and returning the replaced TGB to Eurocopter.

Proposed AD Requirements

This proposed AD would require, within 100 hours time in service (TIS), dye-penetrant inspecting for a crack in the control lever attachment yokes of the TGB casing assembly. If a crack exists, before further flight, this proposed AD would require replacing the TGB with an airworthy TGB.

Differences between this Proposed AD and the EASA AD

We propose that the inspection for a crack in the attachment yokes of the TGB casing assemblies be performed within 100 hours TIS. EASA requires that the inspection be conducted within 26 months or 660 flight hours if the TGB casing assemblies have less than 550 flight hours and within 110 flight hours or 13 months if the TGB casing assemblies have 550 or more flight hours. We do not include the Model AS350BB helicopter because it is not type certificated in the United States, but we do include models AS350C and AS350D1.

Costs of Compliance

We estimate that this proposed AD would affect 693 helicopters of U.S. Registry and that labor costs would average \$85 per work-hour. We estimate that it would take two hours to inspect TGB casing assemblies for a cost of \$170 per helicopter, and \$117,810 for the U.S. fleet. No parts would be needed. Replacing the TGB would require five work hours for a labor cost of \$425. Parts would cost \$37,825 for a total cost of \$38,250 per helicopter.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify this proposed regulation:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- 2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
- 3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by Reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

EUROCOPTER FRANCE HELICOPTERS (EUROCOPTER): Docket No. FAA-2013-0119; Directorate Identifier 2011-SW-034-AD.

(a) Applicability.

This AD applies to Eurocopter AS350C, D, D1, B, BA, B1, B2, and B3; and AS355E, F, F1, F2, N, and NP helicopters, with a tailrotor gearbox (TGB) casing assembly, part number (P/N) 350A33-1090-02 and serial number (S/N) MA47577, MA47585, MA47587 through MA47593, MA47597 through MA47600, MA47602, MA47604, MA47606, MA47610, MA47613, MA47615, MA47617, MA47619 through MA47624, MA47626, MA47628, or MA47631 installed, certificated in any category.

(b) Unsafe Condition.

This AD defines the unsafe condition as a crack in the control lever attachment yoke of the TGB casing assembly, which could result in loss of tail rotor pitch control and loss of helicopter control.

(c) Compliance.

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(d) Required Actions.

Within 100 hours time in service:

- (1) Remove the control lever, as depicted in Figure 1, item (b), of Eurocopter Alert Service Bulletin No. AS350-65.00.46 or No. AS355-65.00.22, both Revision 0 and both dated May 18, 2011, as applicable for your model helicopter (ASBs).
- (2) Strip the paint from the TGB control lever attachment yokes, as depicted in Figure 2, item (z), of the ASBs.
- (3) Perform a Fluorescent Penetrant Inspection (Aerospace Material Specification 2647 or equivalent) on the TGB control lever attachment yokes for a crack.
- (4) If a crack exists, before further flight, replace the TGB with an airworthy TGB.
- (5) If there is no crack, clean the inspected area and apply chemical conversion coating (Alodine 1200 or equivalent), Epoxy primer, and top coat paint.

(e) Alternative Methods of Compliance (AMOC).

- (1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Robert Grant, Aviation Safety Engineer, Safety Management Group, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone 817-222-5328; email robert.grant@faa.gov.
- (2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or

lacking a principal inspector, the manager of the local flight standards district office or

certificate holding district office before operating any aircraft complying with this AD

through an AMOC.

(f) Additional Information.

(1) For service information identified in this AD, contact American Eurocopter

Corporation, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000

or (800) 232-0323; fax (972) 641-3775; or at http://www.eurocopter.com/techpub. You

may review a copy of the service information at the FAA, Office of the Regional

Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

(2) The subject of this AD is addressed in European Aviation Safety Agency AD

No. 2011-0104, dated May 27, 2011.

(g) Subject.

Joint Aircraft Service Component (JASC) Code: 6520, Tail Rotor Gearbox.

Issued in Fort Worth, Texas, on February 1, 2013.

Kim Smith,

Directorate Manager, Rotorcraft Directorate,

Aircraft Certification Service.

[FR Doc. 2013-02989 Filed 02/08/2013 at 8:45 am; Publication Date: 02/11/2013]

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